

Improving User Experience (UX) through Web redesign: a case study of Asian Food Market Oy's Webshop

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Improving User Experience (UX) through Web redesign: a case study of Asian Food Market Oy's Webshop

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Business Information Technology in
Bachelor's Thesis
October, 2017

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Year	2017	Pages	53
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User Experience (UX) has become recognized as one of the most important attributes of design disciplines for digital services and products. UX is extremely important for small and startup businesses since their websites are the primary means of communicating their services to their customers and responsible for forming initial impressions. Having an interaction-rich site guarantees customer attraction and positions the company above other competitors.

The thesis concept was proposed to Asian Food Market Oy, a small retailing business of food and beverage in the Espoo region. The purpose of the thesis project is to introduce UX Design theories to the company by assisting them in evaluating current customer behaviour, providing appropriate suggestions on how to enhance their website design based on the research results, and by providing redesigned website wireframes to demonstrate the proposed changes.

Knowledge required for the topic is based on theoretical background with regard to the UX concept and UX Design principles. The thesis report offers a brief overview of the development of UX terminology, discusses five UX elements and their components in detail and the UX Design concept, and presents two of the most well-known UX design approaches: Agile and Lean UX. Four important attributes which a well-implemented UX Design must obtain - value, adoptability, desirability and usability - are also discussed.

The methods used in this thesis project include interviews and other qualitative research methods, such as personas, customer journeys, heuristic evaluation and usability testings - as well as website wireframe building to propose the suggested changes.

The research results indicated serious vulnerabilities that can affect or interfere with UX when visiting the webshop, which the company had yet to identify due to the lack of specialization and familiarity with UX Design in particular, or website design and related topics in general, and was utilized to manifest the most prominent changes interpreted on the wireframes.

UX optimization cannot be constrained within any particular development phase, as it should be continuously improved throughout the process. Therefore, the recommended improvements should be executed as early as possible since the webshop is already publicly published for customer use. Furthermore, a designated professional should be in charge of constant supervising, managing and refining the UX to enhance the close relationship with loyal customers further and engage new ones.

Keywords: UX design, User experience, Website, Usability

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1 Introduction

Since its initial appearance in 1991 as an assortment of physics papers, Websites have had vigorous transformations and developments to become such vital and indispensable as they are today in our daily life.

Websites are not only containing accessible business information and its available products/services but also not restricted to normal working hours. Due to this, the maximum convenience is provided to customers whereas the geographical and other circumstantial factors had been prevented from interfering with the user experience. Furthermore, a reliable website shall play as insurance before the customers actually commit to the purchase process since they tend to do some online researches on the products' or services' credibility. Obviously, sale boost can also be noted as a significant benefit when having a website ready around the clock, from which effective marketing strategies can be applied accordingly to further spreading the company's presence digitally.

Along with their high-flying growth, user position under the designing eyes has been more valuable than ever. This marks the significance of the User Experience in today's responsive website world.

Asian Food Market Oy is a small business - food and beverage retailer located in Espoo, Uusima region, which was founded in 2010. It established the online service - webshop - in June 2017 to expand its retailing business digitally and to support the company's marketing strategies more efficiently. Having the webshop ready is essential for the growth of such company since the consumer trends nowadays are shifting more towards online shopping due to the convenience and undisputed benefits it brings back.

1.1 Thesis objectives

The thesis targets at the importance of UX design in website building and maintaining, specifically focuses on improving the user experience of a case website and its usability. Furthermore, basic concepts of website design and its core elements are also discussed.

Thesis outcomes are improvement key points in UX Design of the case company's webshop, some redesigned and modified from the original web page wireframes inherited from those proposed enhancement ideas, along with detailed UX research outcomes to back up the need for improvements.

This thesis is the first UX design research carried out for Asian Food Market, which aims at supporting the company to improve their website's marketing strategies, as well as achieving beneficial objectives of the site itself.

1.2 Thesis restraints

The thesis limitations lie within the lack of profitable and sufficient UX related research and statistics since the UX design is fairly uncommonly utilized and strengthened compared to other older concepts in the field. Inconsistency emerged from data collected from various sources might slightly affect the transparency of this thesis.

No similar UX design research has been conducted for Asian Food Market Oy before. Thus, no supporting document can be used to widen the required knowledge of the company's in-depth plan and objectives.

1.3 Research methods

Methods carried out for this thesis are qualitative research, which consists of personas, customer journeys, usability test, interviews, and heuristic evaluation that aim at providing an overview picture of UX evaluated on the case company's site.

The researcher conducted a private interview and discussed with the company's CEO through direct meetings. Beside that, email exchange was the main communication channel for any update or question concerning the webshop and/or the company itself. Any change or proposal, if applicable, was submitted and approved before execution.

Language used for these methods and for the whole thesis in general is English due to the multiculturalism of the company and the researched participants.

1.4 Thesis framework

This thesis consists of nine distinctive sections. Fundamental topic background, thesis purposes, encountered difficulties and proposed method are introduced within the first segment. Then, the academic background which concerns with the thesis's core elements, UX concept and design, emblematic constituents of an efficient UX Design are thoroughly discussed in the second section of the thesis. Chapter three relates to two of the most familiar UX strategies in the market, which then leads to two widely implemented UX research methods in the forth section.

Afterwards, the fifth section is wholly dedicated to analyze the importance of the UX Design process. Next, the study of the case company is presented in detail in the sixth segment to build up the solid foundation for the UX research results demonstrated in the following section. Then, the UX redesign process where solutions to current discovered UX problems are provided, accompanied by suggestive models, are interpreted in the eighth chapter.

The final summary of the thesis is presented in the final section, section nine.

2 Theoretical background

2.1 User Experience (UX)

2.1.1 UX origin

As Treder (2014) and Tariq (2015) describe, it all started quite prominently in the early 1900s, the time when organizations were growing while insufficient skillful labors were available to optimize and apply the advanced machine technology, which pushed way beyond the boundaries of human capabilities at that moment. It was that time when Frederick Winslow Taylor, an American mechanical engineer, attempted to figure out a new way to enhance the industrial efficiency and convenience. He conducted research on the close interaction between the labor and their tools, which was considered the forebear methodical UX research in the history.

In 1948, Toyota successfully implemented the Human-Centered-Production system that highly valued and equally treated assembly worker's contributions. One of the fundamental elements in Toyota's operational philosophy was "respect for people", which engaged workers in process assessment and development as work efficiency is maintained and improved.

Then in 1955, Henry Dreyfuss, an American industrial designer, presented *Designing for people*, in which he presented a variety of methods that UX designers make effective use of with the intention of throughout understanding and designing products that meet and exceed users' needs. This lie amongst the milestones that lead to the creation of User Experience Design.

It was not until the 1970s that the personal computer era started striving. It was also at that time that Bob Taylor, a professional psychologist and engineer, along with his team at Xerox PARC - a well-known R&D laboratory in Silicon Valley, built up some of the most famous human-computer interaction tools up to date, which included the Graphical User Interface (GUI), and the invention of computer mouse.

The official term “User Experience” was coined in 1995 by Don Norman, an electrical engineer and cognitive scientist to report on a list of activities his team was involved in at Apple Computers and due to the insufficiency of the Human Interaction and Usability explanations.

2.1.2 UX definition

According to ISO 9241-210 standard (2010) and Gube (2010), User Experience can be explained as "a person's perceptions and responses that result from the use or anticipated use of a product, system or service." In other words, User Experience is a term used to describe a user's feelings - emotional connections which form while interacting with a system. In other words, the system can vary from being a web application, a website, software or can be served as an indication of any form of human-computer interaction (HCI).

UX is a key factor for complex sites since it shall open up an easy navigation route for the users and provide understandings on how to utilize the intended website functionalities. On the contrary, UX neglect can lead to negative emotions the users might endure while experiencing the site.

According to UXPA - the User Experience Professionals Association (2013), enhancing UX to support the design and development process can bring back six noticeable advantages, amongst them are:

- Increased productivity
- Boost in sales and revenues
- Decreased training and support costs
- Cut down on development time and costs
- Reduced maintenance costs
- Raised customer satisfaction

2.2 User Experience elements

2.2.1 Five UX planes

User experience, as Garrett (2011, 19-21) observes, when being broken down into vital core elements, consists of five different layers, which are:

- The surface plane: The surface consists of a variety of Web pages, formed by pictures and text.

- The skeleton plane: This layer is located right beneath the surface, where buttons, controls, text blocks and photos are arranged and well-managed to be able to deliver the best productivity possible.
- The structure plane: The skeleton, in short, is a solid interpretation of the abstract structure of the website. For instance, while the skeleton designates the interface components, the structure is in charge of guiding the users how to access that specific page, and where to move on to when finished.
- The scope plane: The structure determines the way functionalities and components of the website are unified, while those functionalities and components add up to the scope of the site. In brief, it depends on the scope to have any feature integrated onto the site.
- The strategy plane: Basically, the site's strategy controls the scope. This strategy combines the expectations of the site owners, as well as its users'.

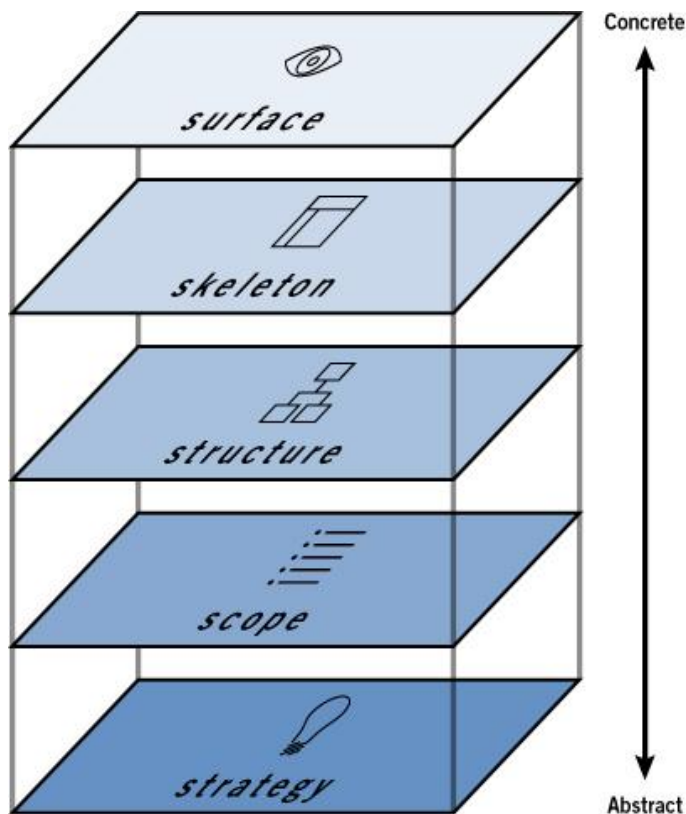


Figure 1: Five UX element planes
(Garrett 2011, 22)

The five planes as mentioned above form an ideational framework for user experience challenges, with the tools required to fix them. They are highly dependent on each other, thus

work on each plane is required to be completed before work on the next can be finished to avoid undesirable outcomes both for website owner and users.

2.2.2 UX elements breakdown

Users normally view Web services from two different perspectives. One considers problems encountered as application design problems, thus implements problem-solving standards from conventional computers and mainframe software world. Others make practical use of the Website as a knowledge exchange platform (both handing out and receiving knowledge in return), so they carry out problem-solving methods from the worlds of media channels, publications, or informatics.

In light of this, according to Garrett (2011, 28-30), five UX element planes need to be split up as shown in the figure below: left side for elements concerned to the Website as a venue for functionality, and right side for elements concerned to the Website as an information medium.

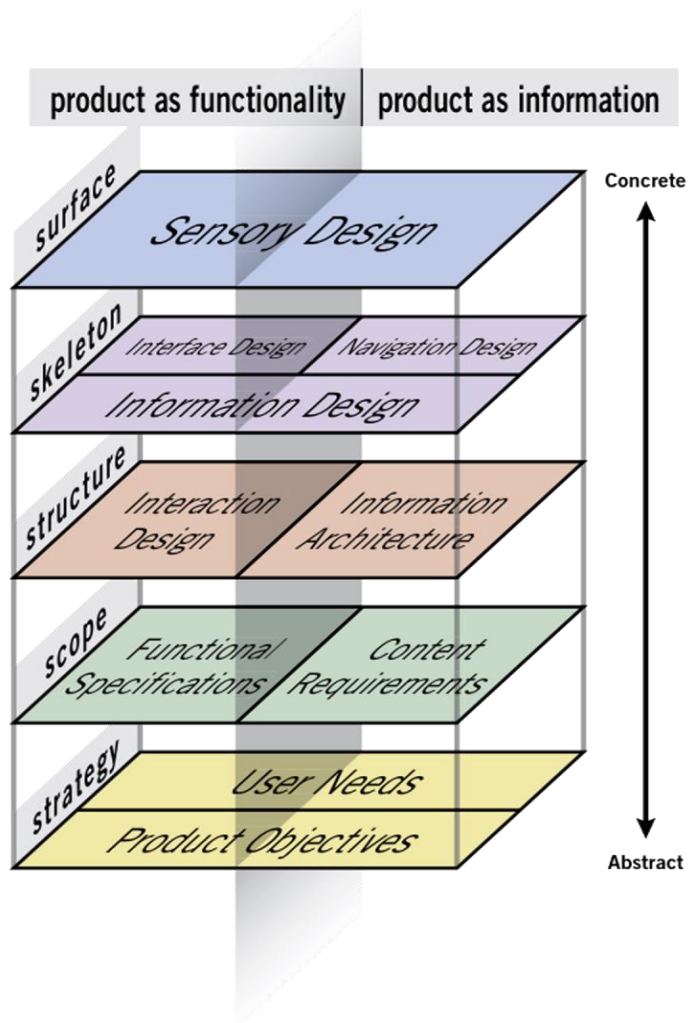


Figure 2: UX elements broken down to its core
(Garrett 2011, 29)

When looking deeper into the components of each plane, how to combine small pieces to outline the whole well-coordinated UX has become more comprehensible.

- The strategy plane: User needs are the ultimate goals a site has to strive to satisfy, which come from outside of the consortium because audience thoughts and desire have to be thoroughly understood. Counterbalancing user needs are our product objectives, which can be the company's business goals or other kinds of goals.
- The scope plane: On the functionality part, functional specifications: a comprehensive interpretation of the product's features transforms the strategy into scope, while on the information part, scope relates to content requirements: a representation of compulsory content components.

- The structure plane: By applying interaction design, where system behaviors in regards to users interaction are demonstrated, the scope is given structure in the functionality section. On the other hand, in the information section, the structure is the information architecture: the content elements organization to ease human understanding.
- The skeleton plane: The skeleton plane is divided into three subparts. Information design, which relates to both functionality and information, is the demonstration of information that supports users' comprehension. The skeleton as well contains interface design, which assists in logically placing interface components so that users shall be able to utilize the system's features for functionality-tailored products. Meanwhile, navigation design, components that guide the users around the site, through the information resource, is considered as the connection for an information source.
- The surface plane: The surface plane is where the sensory experience - the main worry of the completed product - emerges.

2.3 User Experience Design

User Experience Design, according to Allabarton (2016), is the procedure of intensifying customer comfort by enhancing the usability, accessibility through studying the user behavior, accompanied with investigating user motivations with the desire to improve the digital experience. This concept concerns the user every step of the way building up the product.

UX Design is uniquely different from each and other since the user behaviors vary greatly, depending on diverse factors and the actual UX is unpredictable. Therefore, no fixed UX Design framework that can be applied to every web site. Evaluation of the efficiency of a UX Design executed cannot be solely dependent on pure statistics, even though presumption can be made and altered accordingly.

Moreover, UX Design should be completely differentiated from UI Design (User Interface Design) according to Lamprecht (2017), because both concepts are critical to a product and tightly connected, thus easily leads to the misuse and misconception of selfsame. With the purpose of disintegrating these two conceptions, UI Design must be explained.

While UX is a set of tasks aimed at enhancing the effectiveness and relaxation feeling received from a product's functionalities, UI focuses on predicting user behavior and making sure that those required UI components are accessible and comprehensible to assist users in attaining their goals.

UI Design is the combination of visual and interaction design, whereas the product's appearance, impression, and mutuality are concentrated to elevate its productivity.

2.4 Critical components of a well-implemented UX Design

If UX Design is accurately performed, the end-users shall not perceive any significance due to its backstage support to users' interaction with the product's features adequately. Aside from skepticism, disturbance or stagnation, only tranquility and utmost comfort should be delivered genuinely to the users. The relative example of a productive UX Design has to own four important elements: Value, usability, adoptability and reliability in accordance with Brattle (2015)'s description.

2.4.1 Value

Any digital product/service should bring along value to its end-users, which is pivotal to translating clicks to profit, visible information that supports users to determine a purchase option and maintaining a devoted customer foundation. It is a compromise that reflects unfeignedly the harmonized combination between user requirements and the deliverable product. In order to explicate the website's value, its audiences have to be thoroughly researched.

Nevertheless, the value that users receive has to be identical with the proposed value set in the first place. Besides, the final decision still belongs to the customers so solid website content was just halfway to the finish line. The other half lies beneath the exceptional experience they obtain while discovering the site themselves. If the mentioned site failed to deliver that, the advantage goes to better competitors where users can expect to gain more value from.

2.4.2 Adoptability

The worst-case scenario that can happen to a website does not collapse within a deficient design. A terribly coded website with bare or none search engine optimization contains uncategorized and bandwidth-consuming data that cannot be entered by some or even every browser, isolates itself from the outside world is the most prominent instance where adoptability is heavily affected.

Specifically, adoptability relates to trouble-free accessibility of a product and can be considered as an inherent element of the design procedure. In coordination with applying Search Engine Optimization (SEO) and data transmission issues, a fully responsive designed

website proves that the company is willing to keep up with the modern digital world and was prepared to convey the ultimate experience to its users. Whether it is a smartphone, tablet or any kind of smart device, the website should inspire most probable users to stay and enjoy the experience.

2.4.3 Desirability

A major part of desirability concerns with unconventional but pleasant visual design. Even with a convenient and useful product, without focusing on desirability cannot make it favorable in the market. Likewise, desirability should be entitled to the circumstances surrounding the user's tasks.

A desirable product has to attract users towards its predetermined uses. Hence, some designs which were not initially directed at specific non-targeted users surprisingly achieve high satisfaction when it comes to target users. A contemporary and compelling UI shall make the website look applicable and natural. A trustworthy and impregnable overlook boosts up the certainty in sales. A concise and distinct company's identification will outspread its reputation to a large scale instinctively.

Therefore, with the purpose of retaining a product's desirability, an excessively refined visual design should be avoided, and more attention to its fundamental features needs to be invested.

2.4.4 Usability

Usability, under Nielsen (2012)'s perspective, is a quality-related aspect which defines how intuitive, trouble-free someone is capable of using something. More precisely, it specifies how quick would it take for a person to learn to use something, how productive they are at using it, how positive they feel using it, how long would it last in their memory using it, and how effortless it is. If by any chance, users are unable or unwilling to utilize a provided feature, it would have been redundant to have it there in the first place.

Whether it is an appallingly or so neatly designed website, usability drawbacks can still happen when interference with the UX occurs.

2.5 UX design in connection with website

The website itself serves as a self-service product on its own. Therefore, users are usually not given any detailed instruction, guidance or direct assistance before and while visiting one.

Since most websites were initially built considering that being the frontier in the market grants them an extra advantage, understanding and prioritizing user experience have not been valued.

To minimize the gap between existed websites and new ones, adding new content and functionalities to attract new customers, and expectedly draw a small part of other customers from their rivals is the most common way companies are trying to do nowadays. This leads up to overcrowding in the site, unpleasantness, and confusion to the customers.

Thus, user experience design plays an important role in combining aesthetic and functional aspects of website's features to ensure that it works harmoniously in connection with the rest of the website. Also, those features should well serve the purposes of the users while interacting with the site.

2.6 Web usability

According to Nielsen and Loranger (2006), usability and UX are distinguishable since Usability mainly relates to one's capability to successfully execute a task, as UX heads for a bigger picture, the whole interaction of a user with something, accompanied with the emotions, thoughts, and awareness coming out from that interaction.

Thus, with the purpose of understanding the importance of the web usability comprehensively, five imperative criteria of this concept are demonstrated below as:

- **Learnability:** How simple or straightforward would a user who interacts with the web design for the very first time be able to achieve a predetermined goal
- **Efficiency:** As soon as the user is accustomed to the web design, how expeditiously would they carry out required assignments
- **Memorability:** Having the user discontinue interacting with the web for awhile, how effortlessly would they be using the site upon their return
- **Errors:** How many mistakes did the user make, how serious those faults were and how uncomplicated can they recuperate from those errors
- **Satisfaction:** How enjoyable it was interacting with the design

Due to the enormous number of websites providing the same services and products these days, weak Website usability management equals to significant customer loss, because the users will not take time complaining unless they have been miserably treated in some ways.

3 Common UX strategies

3.1 Agile UX

The “Agile” phrase was originated in 2001, at the beginning introduced as a cooperative and versatile software development process. As technical prerequisites are no longer the main center of attention, the designing resources are now invested in building a functional product by constantly checking on customer endorsement.

Agile UX is involved when the User Experience adheres to Agile principles with the main objective is to consolidate developers and designers in the Agile procedure. It complies with a cooperative method in mind where UX designers take responsibilities in handling the repetitive developmental cycles and proposing a variety of customer journeys, which minimizes the potential risks at the early stage of product design.

According to Getto (2016), there are twelve influential and practical principles of this methodology, as indicated below:

- Customer experience (CX): Customer experience implicates and covers the whole UX concept, which encircles every channel and artefact inside the same brand. Inside Agile UX, customer experience not only targets fulfilling customers’ requirements but also aims at meeting the business goals combined with considered customers’ circumstances.

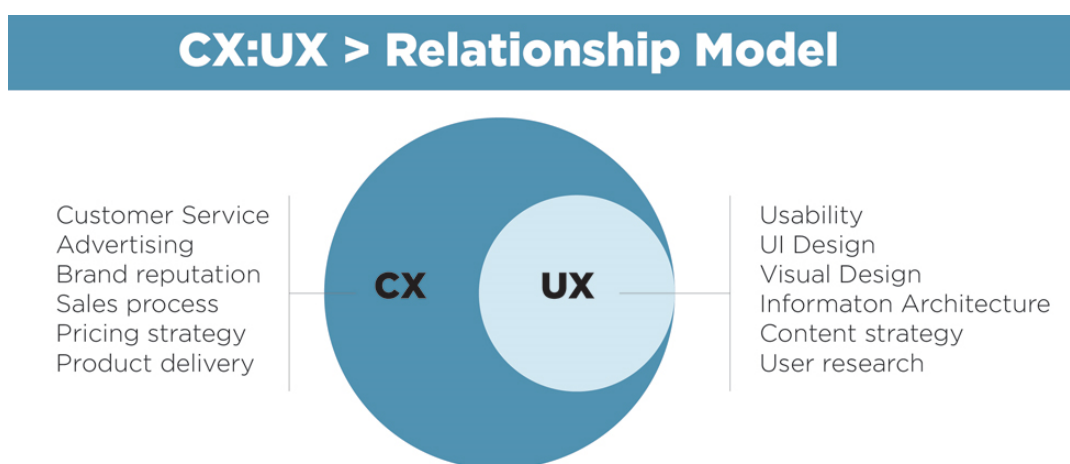


Figure 3: CX and UX relationship
(UXPIN 2016)

- Leading technical and social alternations: As UX designers, delivering a sustainable product, rather than a contemporary and replaceable one is the utmost priority. This prevents the organization from having to invest resources to persistently pursue newer and more suitable design trends, maintain and update their products all the time.
- Development plans which utilize available resources: Resources should be used wisely for process enhancements within specific timeframes to avoid spending irrationally to go after process flawlessness without a defined period.
- Flexible cooperation: The cooperation extent is not contingent on any certain factor, and varies in accordance with different situations.
- Projects constructed by influenced people: Innovative changes and improvements should be endorsed but due to a limited budget, companies are not obliged to invest in every promising solution. Thus ROI (Return on Investment) should constantly be examined.
- Productive communication channel utilization: Instead of restricting team communication within a single channel, by making effective use of a variety of supportive communication tools or platforms, work efficiency and productivity will be greatly ameliorated. Slack is one of the most common communication tools frequently used in the industry for this purpose.
- Functional products and successful UX methodology as comparative standards: User recognition while interacting/using the products is extremely predominant because it shall be impractical if users do not find any value inside. Besides, if an implemented design concept built from low-fidelity prototyping does not prove its feasibility, it is an evident sign to move on with other solutions.
- Endurable development: Obviously, there will be some functionalities a product possesses will become antiquated when time passes. Therefore, constant improvements and updated features have to be applied to satisfy customer's expectations in the long run.
- Comparative technical extent: Considering the size of the organizations, technical requirement levels differ since the suitable plan for this company might be ineffective for other cases.
- Simplicity: This principle applies the same concept to the technical extent mentioned above.
- Multifunctional teams: UX designers, without proper communication during the design process, will eventually produce a deficient artefact. Hence, supportive communications are encouraged at the workplace to support UX specialization productively.
- Versatile teams: Designing teams must have a positive attitude towards facing new obstacles to find out the proper solutions to an unprecedented issue.

3.2 Lean UX

Identified in Ratcliffe and McNiell (2012, 37), Lean UX is a constant working mindset and process that adopts and supports Lean-Agile methodology, applied to smoothen the design progress, dispose of excess waste, harmonize multifunctional parties within a system and retain the user-centered outlook in decision-making. Lean UX cycle is constituted by three essential elements, which can be listed as: Design thinking, Agile software development and Lean Startup methodology.

3.2.1 Design thinking

Design thinking, as stated by Gothelf (2013, 5-6) can be narrated as modifications supported by attentive inspection of user behaviors and expectations in relation to products or services provided. It is a practice that employs the designer's experience and discernment to serve and keep up with users' requirements with current technical capabilities. Design thinking can be involved in any business perspective, which also contributes to extending the limitations, motivation, and possibilities that both designers and non-designers are normally restrained or lack of. In addition, this method also plays an important role as a solid base that supports teams to evaluate the design process under a more comprehensive view and coordinate with each other more efficiently.

3.2.2 Agile software development

According to Gothelf (2013, 6), Lean UX perceives four Agile method's essential principles into application, consecutively demonstrated as below:

- Human beings and collaborations rather than pieces of equipment and procedures: Solution suggestions to a complication should constantly be evoked and discussed openly within teams. Intentionally or not, contemporary equipment and procedures are preventing that from happening within coworker's daily communication.
- Functional software rather than extensive documentation: There are various ways to solve an emerging issue, contributed by many individuals in the firm. However, flooding the plan with those different resolutions without recognizing which is the most suitable and feasible one will waste more time than expected. Accordingly, having a functional software ready at hand will be more realistic for testing and operational purposes.
- User cooperation rather than contract debate: Well-coordination between users and designers provide a broad perspective on the issues and their adequate solutions. This helps quicken the duplications, takes direct participation in the producing progress,

and team devotion to relentless learning. It further removes the considerable reliance on written documents and materials.

- Be flexible with alternation rather than strictly observing a plan: The underlying presumption of Lean UX is that the original product design will mostly be inaccurate. Hence, it is just the matter of time until when the errors are figured out, and how quickly would designers be able to react to, create a solution to it and execute testing for effectiveness right away, instead of sticking to a proposed plan without any other alternative solution.

3.2.3 Lean Startup methodology

According to Gothelf (2013, 7), the easiest way to apprehend Lean UX is through a “think-make-check” or also known as “build-measure-learn” repetitious loop, adapted from Lean Startup method by Eric Ries. This method aims at reducing possible threats and accelerating the team-building and knowledge acquiring processes. Products contain bare minimum functionalities which are initially constructed for early users’ contentment, testing purposes and feedback gathering for later improvements, also called Minimum Viable Products (MVPs), are applied in this method. MVPs do not require to be built entirely by code, while it can just be the estimation of the end User Experience. The more responses being retrieved from MVPs, the earlier they shall be employed to cultivate and improve the ideas and this cycle keeps rotating all over again.

4 UX Design research

Nowadays, it is not because of customers, users demand or personal choice but technological advancements that are leading modernization in the business. Consequently, this raises the possibility that products or services that people may not want to, or are unwilling to use can still be built. Research plays an indispensable role in UX design, considering that it contributes valuable insights and data to the design process. The end user has to be taken into account in the designing process, where their diverse personalities, expectations, and in what situation shall they need the product or service will be reflected. Research approaches in UX design are often specified as either quantitative or qualitative.

4.1 Quantitative research

As Unger and Chandler stated (2009, 227-228), quantitative research is addressed to numerical values, facts and aimed at delivering high confidence, repeatable results within a specific user group. This approach includes a large number of users among that group, which is also

preferred as sample size. Any finding gathered from that can be used to evaluate and anticipate the whole group behavior, with a slight probable error extent. Survey implementation, poll, and questionnaire can be seen as the most well-known representative examples of this method.

4.1.1 Advantages

Profitable outcomes can be gained after applying a quantitative research, such as:

- Consistent and reliable data is collected through this kind of research
- It lessens and reconstructs a complicated problem into a restricted number of variables, which eases the problem-solving process.
- Speculations and theories can be brought out for validity testing through quantitative research.
- Researchers' individualities are less noticeable than they are in qualitative research.

4.1.2 Disadvantages

Some salient drawbacks of this method can be mentioned as:

- Its heavy reliance on common information without the supplementation of users' individual opinions and due to the lack of context.
- The quantitative method requires a considerable quantity of participants, since the greater the sample of people, the more definite and authentic the results shall be.
- Comparing to the qualitative research, quantitative method is not as cost-efficient.

4.2 Qualitative research

On the other hand, qualitative research, as known as soft research, does not concentrate on the confidence extent and repeatability. Context and insight concerned with user behavior are two main factors that this type of research follows. The main focus of qualitative research is to collect responses and insights to what is demonstrated to provoke innovative ideas.

4.2.1 Advantages

Qualitative research can bring back various benefits, which can be listed as:

- Qualitative research does not heavily centralize the data benchmark that is being gathered, rather than target the subtlety of the essence of that information. This opens a comprehensive view into the data that reserves more room for throughout inspection.
- It is not obliged to pursue a fixed pattern or structure strictly and can be versatile depending on the collected or accessible data. This widens the possibility of information accumulation of any subject, not restricted within any boundary.
- This type of research treasures the human instinct as well as their understandings of a specific field.
- Qualitative research does not require as large in quantity the number of partakers as in the quantitative one, therefore opens the opportunities for researchers to enquire into various test subjects in a cost-effective and adaptable way.
- Normally, individual responses can be burdensome to examine, since the common psychological reflex of the users when being asked tends to be subliminally directed towards what they expected others wish to hear, which would overthrow the authenticity of one's true personality and decrease the creativity level. In spite of that, qualitative research emboldens the participants to express their thoughts and leave space for creativity. Hence, collected data will be more reliable and somewhat predictable. These would also be valuable assets for other company's parties, such as marketing and creative teams.

4.2.2 Disadvantages

Nevertheless, qualitative research still has some disadvantages when being conducted:

- Researcher participation in the process of collecting data is inevitable, which can have an effect or influence on users' responses.
- Time resources dedicated for this research type would be more than what it would require in applying quantitative research.
- Profitable findings can be gained through this type of research, although what a researcher obtains from the data can be different from what an outsider get from the same information source due to the complexities when presenting the results.
- It also requires the experimenter to have in-depth knowledge and relation to the field the research is conducted upon.
- Qualitative research is built up from users' perspectives. Thus it does not provide detailed statistical data.

- The natural essence of data gathered from a qualitative research may be a downside in some particular cases, especially when it comes to personal viewpoints and decision-making of different researchers.

5 UX Design procedures, user research, and its significance

User research is the initial step to take while preparing for a UX Design process, which gains an extensive view onto the users, their perspectives, behaviors, own expectations, incentives, and needs. Having the user research conducted preceding all others in time prevents the UX design process from solely revolving around the designer's presumptions and experience since it plays a vital part in forming a concrete substructure for later phases of the process.

The user research important aspect lies within its power of minimizing the unreliability of users' desires and requirements, thus adding up advantages for the users themselves, the company, and the product in general:

- User advantages: User research demonstrates users' reflection, without being interfered by any outside factors. This is sometimes referred as "unbiased user feedback."
- Company advantages: Avoidance of troublesome redesign process and accompanied expenses, product development acceleration and end-user's contentment boost.
- Product advantages: It also contributes detailed personalized data about the users, product usage timeframe and what purposes shall the product serves.

5.1 User interview

Face to face interview is a personal discussion between the interviewer and the end-user, which aims at exploring the fundamental needs and concerns users tend to have interacted with the product. Video capture and audio recording can be used for obtaining valuable information and reactions from the users.

However, there are still some drawbacks with this kind of approach:

- Human's memory cannot always capture precisely every little detail and experience, which is an unavoidable natural instinct. Consequently, people unconsciously make up these missing details, which unintentionally affect the trustworthiness and authenticity of the provided data.
- Interviewer participation, even in contextual interviews (inspecting users while they interact with the product before conducting the actual interview), usually leads to

the intuition of users answering the questions the way they assumed the interviewer wants to hear, which is in most cases, inaccurate.

5.2 Persona

In the early 80s, Alan Cooper, an American software programmer and designer, developed his own design philosophy into a subpart of the user-centered design methodology, called at the time “goal-directed design,” with personas as an essence of the process.

Persona, according to Goltz (2014), is a method in which user research under observation or conducted in other forms is replicated, compiled and demonstrated. It is represented as a particular individual but is an unreal person, who was produced from the whole monitoring experience of other users. Utilizing personas in UX Design process assists designers in concentrating their focus onto a representative and a practical number of testing subjects, rather than distributing the attention irrationally to a mass number of people.

5.3 Customer journey

Customer journey, as Kaplan (2016) views, is a visualization tool used to convey the whole procedure a user has to go through to achieve a specific goal, with the aim of revealing the users’ requirements and obstacles faced, as well as comprehending the whole experience.

This method is the harmonizing amalgamation of two most critical implements in journey mapping: story-telling and envisioning, which helps to deliver information in a precise, indelible way under the same aspect. Possible technical issues, faulty functionalities, which might lead to customers’ dissatisfaction and damage the user experience as a whole, can be discovered by applying this method.

Customer journey map should always work parallel and back up a business goal to be able to denote precious insights. Some relevant business goals where customer journey mapping can be exerted can be mentioned as:

- Transferring the company’s viewpoint from external to internal
- Subdividing the system to create and allocate a unite vision throughout the entire company
- Allocate responsibilities for vital touchpoints to correspondent division inside the organization
- Direct particular customers

- Utilize quantitative statistics and data

5.4 Heuristic evaluation

It was in the 1900s that Jakob Nielsen, a famed web usability adviser and partner at Nielsen Norman Group, accompanied by Rolf Molich, another well-known usability specialist, constructed a usability testing approach with the purpose of extracting the problems related to usability by comparing a User Interface Design with acknowledged usability standards. Apple Co., Google, Adobe are three of the most recognized organizations that have been applying this methodology to their products/services.

According to Nielsen (1995), the ten cultivated heuristics consist of:

- Visibility of system status: Users should always be aware of their current situation, notified by pertinent feedbacks in a rational and acceptable time duration.
- Match between the system and the real world: Users should have full capabilities of interacting and utilizing the system through their languages, exchanging information through customary expressions and terms. Furthermore, the information presented should be sensibly and ordinarily organized.
- User control and freedom: There is a high chance that users shall sometimes select an undesirable functionality, thus an option to remake their choice, or to return to their original position should be available without having to go through a long and stressful process.
- Consistency and standards: No confusion should be delivered to users regarding re-sembling word meanings, circumstances or actions.
- Error prevention: Users should not take any responsibility for encountering a system failure. Therefore, an error elimination mechanism should be maintained and frequently checked to ensure the integrity of usability.
- Recognition rather than recall: No memorization skill should be desired from the users' points of view by logically displaying articles, alternatives, and actions for user selection.
- Flexibility and ease of use: Applying the use of accelerator to quicken the process of serving normal and experienced users
- Aesthetic and minimalist design: Messages shown to the users should contain only essential and beneficial pieces of information and are compact tightly that do not affect other elements' visibility.

- Help users recognize, diagnose, and recover from errors: Error notifications should be interpreted in no other than plain language, determining the mistake and suggesting the appropriate solutions.
- Help and documentation: This supportive information should be easy to access and should carry detailed and concrete steps to follow.

Utilizing Heuristic evaluation, as Wong (2017) and Schlecht (2017) describe, to support a Design process brings back enormous benefits:

- Convenience and low requirements of time, expense
- Users' responses can be gathered at an early stage of a design process
- Capability to work efficiently alongside with other usability testing approaches
- Possible problems found can be further investigated by implementing a usability testing

Despite the wide usage of Heuristic evaluation, this methodology still retains some downsides:

- To achieve the ultimate effectiveness of Heuristic evaluation, related knowledge and experience should be obtained before implementation
- A small variety of professionals should be included in this process to provide an overview of the UI's usability and figure out as many issues as possible
- Insignificant problems found by this approach can outnumber the considerable ones

However, Heuristic evaluation should not take over the importance and need of conducting a usability testing separately.

5.5 Usability testing

Usability testing, according to Rubin and Chisnell (2008, p. 21) is perpetrated as an effective method that improves UX significantly by observing actual end-users interacting with the trial product to acquire precious design perceptions, which can later be utilized to support the re-design process.

Usability testing can be conducted through various approaches, which can be listed from hallway testing (which takes place in a high-traffic area and involves passers-by) to eye-tracking software (that targets at the users' eye movements as they interact with the website), heat map tracking tools (that traces exact positions on the site where users have clicked on or tend to avoid) and calculated algorithm (which instinctively records data and produces the usability related results.)

There are seven fundamental aspects of the usability testing process:

- Focus more on the improvements of the research inquiries or testing purposes, instead of pure theories
- Employment typical user groups in testing procedures
- Depiction of a genuine workplace
- Inspection of end-users who analyzes or reflects the description of the product/service
- Test conductor's proper adjustment and jurisdiction that complies with initial purposes
- Assortment of both qualitative and quantitative data presentations
- Suggestions to enhance the design process

Despite numerous advantages usability testing may bring, there are still some drawbacks when applying this method:

- Unfortunately, testing can never be natural due to the undeniable and requisite need of human participation. The activity of performing the usability testing itself can influence the outcome.
- Test outcome can only be used for referencing and does not completely guarantee a product's efficiency. Even if there is a remarkable difference in the gathered data, the overall performance of the product cannot be entirely judged on that.
- Tested user groups cannot constitute the whole proportion of every potential target user because they are just representatives who cannot possibly reflect the comprehensive view of every unpredictable end users.
- Depending on specific cases, testing might not be the most suitable method to apply.

6 Case study Asian Food Market Oy

6.1 About the company

Asian Food Market Oy was established in 2010 in the municipality of Espoo, Uusima region, Finland. The company has been a sustainable and prestigious retailer of food, beverages, and tobacco since then. Primary products that they supply include Asia-originated food ingredients, drinks, and vegetable imported weekly to maintain the freshness. Asian Food Market's target market is identified as private customers at present, with the majority of their clients are students and immigrants living in Espoo or nearby regions. Their turnover in 2016 reached 525 thousand euros, which was lower than the previous year's result (11.5% in difference)

while their annual profit amounted to 73 thousand euros, just 2 thousand less than the preceding year.

Asian Food Market aims at providing customers with a variety of reliable, unique and high-quality food products with competitive price ranges through either direct or online shopping. At the moment, the company is now importing goods from 5 Asian countries: Vietnam, Thailand, Korea, China and the Philippines and expected to expand further in the future.

6.2 Asian Food Market's website

Asian Food Market is now operating two separate websites: asianfoodmarket.fi for digitally promoting and demonstrating their available products and asianfoodonline.fi for online shopping and delivery requests.

Their initial site, asianfoodmarket.fi, started as a Laurea University of Applied Sciences' student project, went online in 2013. Aside from its original Finnish pages, the site also has a translated English version for non-Finnish users. Depressingly, this website is not responsive and compatible with every device used to access. For the past 4 years after its introduction, the website has rarely been updated and only contains elemental information about the company and its products.

Their latter web page: asianfoodonline.fi, published in June 2017, was built up entirely on a pre-chosen website model from a third-party platform called Finqu. The site was chosen from available themes, implemented to support the coexisted site and provide distinct features for online purchase and order. At the moment, the webshop only supports a Finnish version. The website is just relatively published. Thus the website content has yet to be sufficiently provided. Furthermore, the company has no specialized professional assigned to maintain, upgrade the website content, which at the moment is solely taken care of by the company's CEO.

In the context of this particular thesis, asianfoodonline.fi - the webshop - would be researched and conducted UX Redesign methods upon.

6.3 Research scheme

The research process took place from mid-June 2017 to the beginning of September 2017. Detailed research process timetable is demonstrated as below:

Date	Task
June 26 th , 2017	Prepare interview question list for case company representative
July 13 th , 2017	Send the draft question list to the case company for approval and set up meeting date
July 17 th , 2017	Conduct an interview with the case company's CEO
July 20 th , 2017	Prepare required documents and background questionnaire to conduct usability testing
July 24 th , 2017	Set up meetings with ten participants, send emails to verify specific meeting time and locations
July 25 th , 2017	Conduct interviews with participant 1 to 3
July 26 th , 2017	Conduct usability testings with participant 1 to 3
July 27 th , 2017	Conduct interviews with participant 4 to 7
July 28 th , 2017	Conduct usability testings with participant 4 to 7
July 31 st , 2017	Conduct interviews with participant 8 to 10
August 1 st , 2017	Conduct usability testings with participant 8 to 10
August 3 rd , 2017	Summarize the information collected from the individual interviews
August 5 th , 2017	Make detailed graphs on the gained salient information
August 10 th , 2017	Create Finnish persona and customer journey
August 13 th , 2017	Create international persona and customer journey
August 17 th , 2017	Conduct a heuristic evaluation on the case company's webshop
August 18 th , 2017	Summarize the result from the heuristic evaluation
August 23 rd , 2017	Create a suggestive list based on the findings and testing results
September 21 st , 2017	Creating some webshop wireframes in accordance with the provided suggestions

Table 1: Research timeline

6.4 Research data

The data source utilized for UX research process comes from a direct interview with the company's CEO Juha Kalevi Korpela, combined with ten distinct user interviews to study their behaviors, UX patterns and support the usability testing procedure.

6.5 S.W.O.T analysis

This approach is executed to contemplate the business's advantages and downsides, as well as the chances and risks it encounters in the marketplace with the intention of improving the company's business strategies.

For the case company, SWOT analysis can be beneficial in evaluating an evolving environment and adapt actively in accordance with the situation.

6.5.1 Strength

Being the frontier in retailing Asian food and drink products in the Espoo region granted Asian Food Market Oy huge advantages from an unexploited business field. The product varieties are frequently updated with new categories added corresponding to customers' requests or potential market trends, and their prices are significantly lower than which sold in Finnish retailers. As business is developing with the online purchase and direct delivery is now available, consumers are given many more opportunities to get their wanted goods, which in return is more profit for the company. Additionally, the business is located in a busy residential area, with easy public transportation access that supplements accessibility and convenience. Moreover, with seven years of operation in the market and more to come, valuable, and insightful experience is employed to improve the service quality and enhance the customer satisfaction and loyalty frequently.

6.5.2 Weakness

Two company websites might create confusion to customers since they practically contain the same content, with minor differences in specific functionalities. Since the latter site was just published, information displayed is yet to be sufficient and finalized. Unfortunately, the company's webshop is inaccessible on mobile devices because of its incompatibility and irrational design. Meanwhile, UX in their first website is as well not appreciated because the company

only considers it as the informative platform for their users, where the products' details are mostly not updated. Also, limited time resources, low budget investment and lack of dedicated staff for UX research, UX Design, website establishment, and maintenance can be named as some of the critical factors that cause the business's frailties in the digital world. Besides, wholesaling is not available at the moment due to insufficient infrastructure, funding, and staff, which might lead to possible customer loss and beneficial business opportunities.

6.5.3 Opportunity

The community trend is shifting towards online shopping more and more, which is an invaluable chance for the company to strive and explore this new market since the online platform is now ready to be utilized. With proper modifications and testing for the websites, Asian Food Market Oy shall be on its right track to success. Their vision is to become a wholesaler in the Espoo area, extract the opportunities to connect and supply other small businesses (restaurants, diners, other markets, shops, etc.) with the company's imported products in large quantities weekly, which is also the company's interim plan.

6.5.4 Threat

The inconsistent website management with the lack of conventional updates and maintenance will badly influence on the business's marketing efforts. On the other hand, the language barrier is another risk to be considered since the company's webshop is not yet bilingual (Finnish-English) while part of their target customers are students or immigrants who might not be acquainted with or fluent in Finnish, which equals to loss in users' interests in website content. On top of that, when it comes to high-end commodities that are not derived from Asian countries, the company faces notable challenges when compared to similar high-quality products sold from Finnish corporations or retailers. This limits the company's possibilities to expand to other markets that focus more on quality, not cost.

7 UX research results

7.1 Finnish website user persona and customer journey

The first website user persona is a Finnish speaking woman named Marja Joutsenniemi who is working full-time as a document translator (from Finnish to English), and part-time as a yoga teacher. She has a genuine interest in trying out distinctive home-cooked Asian cuisines that are far different from her traditional dishes since she had the opportunity to try them out a

few years back from her summer trip to Asia. She has never used any online service to purchase food products and only went direct shopping at the grocery stores or nearby supermarkets. Due to her busy working schedule, she always finds it difficult to have the required ingredients for the new recipe she wants to experiment ready as soon as she gets home right after work without having to spend more time searching for them at the store.



MARJA JOUTSENNIEMI

- Female, 27 years old, from Finland
- Document translator (Fin-Eng), part-time yoga teacher
- Single
- Just moved to Tuomarila, Espoo 2 months ago

- Friendly, sociable, progressive and self-confident
- Adventurer and explorer
- Passionate about Asian cuisines

Goals: Find out an easier way to search for her required Asian food ingredients with viable delivery/pick-up option

Job	Personal relationship	Skill
<ul style="list-style-type: none"> • Full-time student (Information Technology major) • Teach yoga as a part-time job 	<ul style="list-style-type: none"> • Her parents are living in Oulu • Her younger brother Samuli is studying and living in Helsinki 	<ul style="list-style-type: none"> • IT: 6/10 • Language: Finnish (native) • English (8/10) • German (3/10) • Swedish (4/10) • Yoga: 8/10 • Business: 7/10 • Educational background: 7/10

Background:

- Marja is working as a document translator (Fin-Eng) and as a part-time job a yoga teacher
- Her hobby is mostly related to food processing and cooking for her friends and family members. She is happiest when mastering a burdensome and foreign recipe for her close ones to savor.
- She also enjoys taking part in various daily sport activities while listening to her favorite music.
- Marja is always open to new challenges with a positive attitude

Obstacles: <ul style="list-style-type: none"> • It always takes a lot of time in looking for the right ingredients for her testing recipes, which sometimes are out-of-stock without her acknowledgment, which affected the whole trip to the market (timewise and emotion-related). • She eagerly aspires to have a system or service that supports her in searching for her required food products more efficiently, not so time-consuming and also handling home delivery. • Marja does not know much about food online service or website and has never used one. 	
User social media channel (categorized upon user's frequency) <ul style="list-style-type: none"> • Facebook • Twitter • Youtube • Instagram • LinkedIn Other brand/service <ul style="list-style-type: none"> • Adidas • Gmail • Spotify • Tori.fi User's owned devices <ul style="list-style-type: none"> • Lumia 650XL (common use) • Samsung Galaxy S6 Active (personal use) • Apple's iPad Air 	User's daily schedule (weekday) <ul style="list-style-type: none"> • 6:00 Wake up • 6:30 Morning exercises and yoga practices while listening to favorite music at a nearby gym • 7:30 Return home, personal hygiene • 8:00 Prepare and have breakfast • 8:45 Arrive at workplace • 11:15 Lunchtime • 12:30 Back to work • 16:00 End-day meeting • 17:00 Leave the workplace • 18:00 Teaching yoga class • 19:00 Look for food, ingredients, and fresh daily products/vegetable/fruit at the supermarket that is close to her residence • 20:00 Prepare and have dinner • 21:00 Take a shower • 21:45 Leisure time - talk with family members, friends, check social media channels, listen to music, prepare stuff for the next day • 23:45 Personal hygiene • 00:00 Go to sleep




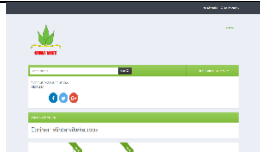
Table 2: Marja Joutsenniemi's persona


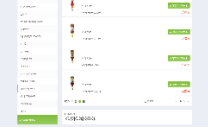

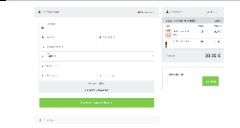
When reviewing Marja Joutsenniemi persona, some particular attributes can influence this user group are discovered:

- Naturally, as Finnish people are native in Finnish, people do not tend to request for an English translated version of the website, because they are comfortable with reading and understanding the presented information.
- It is absolutely common for Finnish people to possess two or more devices that support daily uses.
- The popularity of Asian food culture in general, specifically when it comes to the diversity and distribution of Asian food elements, they are yet to be familiar to Finnish people.
- Various social media channels are used to communicate with each other and information exchange.
- The inconvenient and time-consuming process of having to shop for unfamiliar products has been a barrier that prevents food enthusiasts and food explorers from trying out new things from other traditions, which indirectly negatively affects related businesses.

Then, Marja's customer journey mapping of awareness, searching and ordering products for home delivery on Asian Food Market's webshop is illustrated below

	DISCOVER	RESEARCH		
Action	Having a difficult time looking for the ingredients she needs for her new Vietnamese favorite dish: Broken rice with grilled pork chop, Marja asked her younger brother Samuli, who then did some researches and told Marja if	With her tablet, Marja did a quick search on Google to find out more about Asian Food Market and the services it provides.	She noticed that, as advertised on the Facebook page, the company website is: asianfoodmarket.fi, and decided to check out for the webshop her brother mentioned	Marja then proceeded on accessing the webshop

	she knew about Asian Food Market webshop services			
Result of action	Marja had no idea about the mentioned webshop	She realized the company has a Facebook page that promotes its products and visited that Facebook page to check out	The website turned out to be containing only the minimal information about the company and its products, with the content missing or not updated. Website front page linked Marja to another web page, which is Asian Food Market's webshop that she intended to visit at first.	She finally reached the webshop her brother recommended
Emotion	Surprised	Hopeful	Slightly confused	A bit annoyed and tired
Touch point	 <p>Younger brother Samuli Joutsenniemi</p>	 <p>Company's Facebook page</p>	 <p>Company's website</p>	 <p>Company's webshop</p>
	CHECKING FOOD PRODUCT		ADD PRODUCTS TO BASKET	PAYMENT AND DELIVERY SETUP
Action	Marja begins searching for her missing key ingredients: Broken rice, fish sauce	She then proceeds to check the fish sauce section	Marja decided that she would like to buy those products, so she added both the rice and fish sauce she just found to the basket	Marja reviewed once again the products she previously chose

Result of action	When she searches for broken rice, the page did not refresh or show any sign that the request was executed until Marja scrolled downward	The process was quite fluent without any difficulty since the fish sauce category is clearly displayed.	No obstruction emerged at this stage	Details about the products are all distinctly shown (price per item, total price before and after tax). Marja even had the chance to alter the quantity if wanted
Emotion	Irritated	Pleasant	Enthusiastic	Surprised and satisfied
Touch point	 <p>No notification from the site when Marja searches for broken rice</p>	 <p>Fish sauce list is clearly presented</p>	 <p>Marja's products added to her basket</p>	 <p>Overview of Marja's ordered products in her basket</p>
PAYMENT AND DELIVERY SETUP				
Action	Marja is then required to fill in her personal contact information. She cannot move forward to next steps unless this section is filled out. Moreover, a 30-min-countdown timer appears on the page, requesting Marja to	Next, she tried to move on to the delivery method.	One last step before the purchase is completed for Marja: Payment method. Marja chose to pay through online banking.	Marja rechecks every detail about her purchase before finishing with the payment.





	complete the purchase.			
Result of action	No statement declares how Marja's personal information will be maintained and whether it is safe when submitted to the webshop. The timer unintentionally urges and discomforts Marja.	Only one option is available: Pick up directly at the nearest Posti vending machine	Many payment options are available	The product overview is shown to Marja before her final payment takes place.
Emotion	Puzzled, nervous, easeless	Slightly disappointed	Positive	Calm
Touch point	 <p>Webshop's information section</p>	 <p>Various payment methods support the webshop The only delivery method can be chosen from the list</p>	 <p>Various payment methods support the webshop</p>	 <p>Product summary section before payment</p>

Table 3: Marja Joutsenniemi's customer journey

Some complications have been seen throughout Marja's customer journey, which can be mentioned as:

- Confusion from the company maintaining two different websites while the webshop is not listed and advertised on their Facebook page, making its discovery more difficult and troublesome.

- Poor webshop and search engine optimization makes it invisible on Google's top results when searched.
- Boring and unresponsive design that does not follow current digital trends.
- The lack of detailed instructions which support navigation around the web page.
- Product details are not sufficient (Missing illustrative images of the real item, many products listed on the website cannot be found on the webshop).
- Delivery method option was limited, while Marja was expecting various viable options when it comes to delivery.

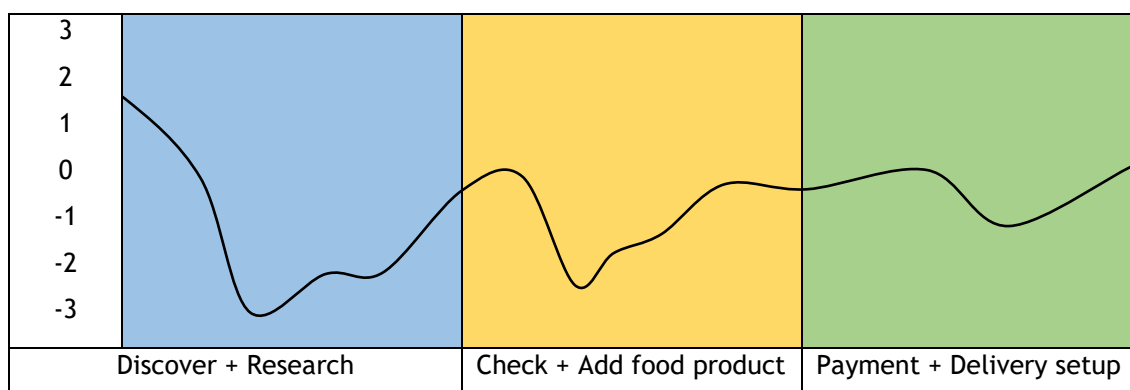


Figure 4: Marja Joutsenniemi's emotion chart


The breakdown of Marja's experience comes from the limited visibility of the webshop information displayed both on the Facebook page and the website. This affects the efficiency of marketing for the web shop since users like Marja find it extremely difficult to discover Asian Food Market's webshop and the service it provides. It relied eventually on Marja's decision when it came to the difficulties in locating the webshop, whether she found it too time-consuming and exasperating or tolerable to some extent. Fortunately, in this circumstance, thanks to the tip-off from her brother Samuli, Marja tried her best to look around for the webshop that she was desperately in need of. It is also noticeable that Marja's emotion was lowered quite significantly when she searched for her food ingredients on the webshop. The search page did not refresh, and no pop-up or notification was used to notify about the result of her search. This confounds Marja with the uncertainty of whether there is something not working with the website or the error lies within Marja's device that she used to access the web page limits the webshop accessibility, disrupts and disturbs the whole UX in general.

However, there was no outstanding record of Marja's positive emotion throughout the whole customer journey, which can be explained that the webshop performance regarding both functionalities and proving the ultimate UX has not met the customer's expectations. Even though a solution to Marja's problem was equipped, the delivered assistive product was not elaborated and perfected. This leaves rooms for later alternations and improvements.

To sum up, Asian Food Market provided a functional online service, but far from being the best. As technology evolves and changes each and every day, necessarily related modifications need to be implemented to utilize the webshop's functionalities, maximize its profitable effectiveness, attract new potential customers and fully satisfy its regular ones.

7.2 International website user persona and customer journey

The next website user persona belongs to a Filipino third-year university student named Joshua Reyes who is currently studying in Finland. His major is in Information Technology at Metropolia University of Applied Sciences, Leppävaara campus. Apart from his daily study schedule, he also works part-time as a worker for a cleaning company. Even though he has been residing in Finland for the past two and a half years, he still maintains his habit to cook himself traditional Filipino dishes at least four days per week to reduce his homesickness abroad. He is quite acquainted with purchasing goods, mostly electronic devices, and digital games, from different online platforms but he has never used an online service to order food products.

<div>  <div> JOSHUA REYES <ul style="list-style-type: none"> Male, 22 years old, from the Philippines Bachelor student (Information Technology), part-time cleaning worker Single Has been living in Espoo for the last 2.5 years Adaptable, diligent, calm, persistent and practical </div> </div> <div> <ul style="list-style-type: none"> Have great interests in online gaming and social media </div> <p>Goals: Figure out a more efficient but less time-consuming way to spend less effort in purchasing food ingredients for his Filipinos home-cooked dishes</p>		
Job <ul style="list-style-type: none"> Full-time student (Information Technology) Cleaning worker as a part-time job 	Personal relationship <ul style="list-style-type: none"> His parents are still living in the Philippines Joshua is the only son of the family 	Skill <ul style="list-style-type: none"> IT: 8/10 Language: Filipino (native) English (7/10) Finnish (2/10) Online gaming: 7/10 Programming: 6/10

		<ul style="list-style-type: none"> Educational background: 7/10
Background: <ul style="list-style-type: none"> Joshua is now studying full-time (Information Technology) and working part-time as a cleaning worker He loves to participate in outdoor activities and hang out with his friends on weekends, and he mostly spends the rest of his free-time playing online games Joshua would prefer convenience and time saving over the quality of a product. He is most relaxed in his comfort zone with familiarities. Joshua is quite conservative when it comes to alternations or trying out new things. Joshua knew about the shop and had previously purchased goods on-site but was not aware of its webshop publishment. He usually prepares dishes in a large amount to keep them stored for various week-day meals. Joshua considers himself as an intermediate Internet user. 		
Obstacles: <ul style="list-style-type: none"> His time resource has just declined noteworthyly as from the day he got accepted a position at the cleaning firm. Combining that with his full-time study, he barely gets anytime left to buy food ingredients from the stores or markets anymore. However, he still refuses to give up on cooking and to enjoy his authentic Filipino dishes weekly. Joshua is willing to have an online service where he can easily browse and order his food items wherever he is and has them delivered to his apartment. Joshua has never used an online service to purchase food ingredients 		
User social media channel (categorized upon user's frequency) <ul style="list-style-type: none"> Twitter Youtube Facebook Instagram Linkedin Other brand/service <ul style="list-style-type: none"> Steam Gmail Viber eBay 		User's daily schedule (weekday) <ul style="list-style-type: none"> 7:30 Wake up 7:40 Personal hygiene routine 8:10 Catch the bus and train to school 8:50 Arrive at school, grab a quick breakfast at the cafeteria 9:00 Start the morning session 10:15 Small break time 10:30 Back to the second session 11:30 Have lunch at the school canteen 12:30 Afternoon sessions

User's owned devices <ul style="list-style-type: none"> • Lumia 920 • Samsung Galaxy Tab S2 9.7 4G • Laptop Dell Inspiron 15 7000 	<ul style="list-style-type: none"> • 16:00 School ends • 16:30 Go shopping for food ingredients • 17:30 Return home, prepare and have an early dinner • 18:10 Change uniform and catch a bus to work location • 19:00 Begin work shift • 20:50 Take a quick break • 21:00 Begin the second shift • 22:30 Change clothes and get back home • 23:10 Arrive home, personal hygiene • 23:30 Leisure time - check social media, play online games, listening to music or finish any school assignment required for the following day • 1:00 Go to sleep
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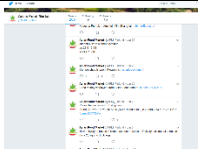

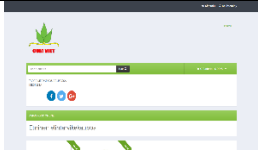

Table 4: Joshua Reyes's persona


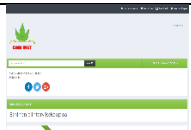
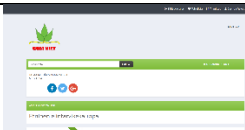

When considering Joshua Reyes's persona, some salient features of this user group can be listed as:

- As a foreigner like Joshua, their Finnish language skill is just barely enough for daily communications, which raises the need of having a fully translated version of the provided service if the webshop's target customer is this user group.
- Rather than possessing only one mobile device for daily usage, at least an additional smart device is obtained to support leisure activities, which is quite ordinary in this modern world where most things are now digitalized.
- The busy everyday schedule turns food shopping into an almost impossible and impractical task due to its essence of arduousness.
- Joshua was confused with whether he was required to sign up for a customer account before ordering the products or it was not obligatory to do so.

Next, customer journey applied to Joshua that demonstrates his process of discovering, foraging and arranging product delivery is shown below:

	DISCOVER	RESEARCH		
Action	Having shopped onsite at Asian Food Market, visited their main website, followed their Twitter account, Joshua found out their webshop from their new tweet introducing the online service. With a traditional Filipino dish in mind - Chicken Adobo - an order needs to be placed to prepare for the weekend.	Joshua accessed the website to find out more about the webshop they had just published using his smartphone.	Joshua then switched to use his laptop to access the webshop	Frozen chicken breast, bay leaves, and vinegar are three key ingredients Joshua is in need of for his dish. Joshua initially checked the product availability on their website first before heading to the webshop to begin the order process
Result of action	Apart from a single tweet, no follow-up information is updated on their social media channels.	Only one single line on their website mentioning the webshop, which can easily be missed without carefully noticing. Moreover, the connection went through, but the website is unresponsive, not mobile-friendly.	Fortunately, the webshop is fully responsive. However, since the webshop is only in Finnish, Joshua had to use a third-party website (Google Translate) to understand the webshop content partly.	Those ingredients are all in-stock at the shop, as shown on the website after conducting some searching.

Emotion	Surprised, excited	Extremely disappointed, irritated	Inconvenient, discomfort	Ensured
Touch-point	 <p>The only tweet announcing the webshop launch on Asian Food Market's Twitter can be seen.</p>	 <p>Webshop info is barely visible on the company's unresponsive website.</p>	 <p>The company's webshop</p>	 <p>Bay leaves (1 out of 3 required ingredients) search on the website</p>
	SIGN UP		SEARCH PRODUCT	
Action	Noticing a sign-up option on the top right of the webshop, Joshua was unsure if he is obligated to have a customer account to utilize the webshop functionalities fully He decided to sign up for an account	Joshua finished the sign-up process and continues with looking for the food ingredients	Joshua began to search for the products on the webshop. Firstly, he tried to find the chicken breast	He begins to scroll down and finds out that the search result is located beneath the social media icons
Result of action	Joshua is required to fill in personal information in a registration form. Language used on the form is not consolidated (A few English words were	Additional features (Wishlist and subscription) are provided to the logged-in customers	The search button is clicked, but the page remained static. Joshua clicks again on the Search icon and even refreshes the web page but nothing seems to change	No chicken breast product is found from the search on the webshop

	mixed in with a mostly Finnish form)			
Emotion	Tired and lost	Calm	Confused	Disappointed
Touch-point	 <p>Registration form on the webshop</p>	 <p>Front page after signing up</p>	 <p>No notification or page change when the search button is evoked</p>	 <p>No result was found for chicken breast on the webshop</p>
	SEARCH PRODUCT	DELIVERY VERIFICATION		PAYMENT + ORDER SUMMARY
Action	Since the webshop is just published, Joshua suspects that the website content is yet to be adequately supplemented. Therefore, he decides to give the webshop another try by looking for the rest of the food products that he is in need of.	Despite the unavailability of his expected food products, Joshua still wants to check out the delivery options Asian Food Market offers by testing out the purchase process in case of the company later updating and finalizing the webshop, Until then shall he make an actual order.	He moved quickly to view the delivery possibilities, swiftly browsing through the contact info and payment options	Joshua then saw multiple payment methods to be chosen from. Finally, Joshua came to the Product summary to view the final price of the products he chose and the related information for this testing order.
Result of action	Unfortunately, only vinegar can be found on the	Joshua randomly picks	His personal information was taken straight from the	Well-organized, comprehensive details about the products

	webshop while the latter ingredient - bay leaves - ended up unavailable.	multiple products, adds to his basket and proceeds to checkout.	customer account he signed up previously, which saved a lot of time. Only one delivery option is provided.	and the delivery process are presented to Joshua
Emotion	Highly depressed	Optimistic	Somewhat disappointed but still pleased	Impressed
Touch-point	 <p>The only food item out of three wanted products can be found on the webshop - vinegar</p>	 <p>Joshua's trial shopping basket</p>	 <p>Two different delivery options are provided</p>	 <p>Product summary section before payment</p>

Table 5: Joshua Reyes's customer journey

Throughout Joshua Reyes's customer journey, some obstacles emerged before and while interacting with the webshop's service:

- Illogical placement of social media icons hinders the customer view onto the search results
- The critical need of an English-translated version of the webshop is highly on demand, just as the same as they had on their main website to support and serve the majority of non-Finnish customer's requirements.
- The inadequate product list is demonstrated on the webshop, which requires immediate updates and supplementations. This should be targeted as the utmost problem that needs resolving as quickly as possible.
- Proper documentation or a dedicated FAQ (Frequently Asked Questions) section are required to be implemented to sustain and enhance webshop navigation and clear out unwanted common problems.
- Extra delivery alternatives, such as door to door delivery should be added.
- Clarification should be stated to inform customers about the account sign up process, whether it is optional or mandatory.

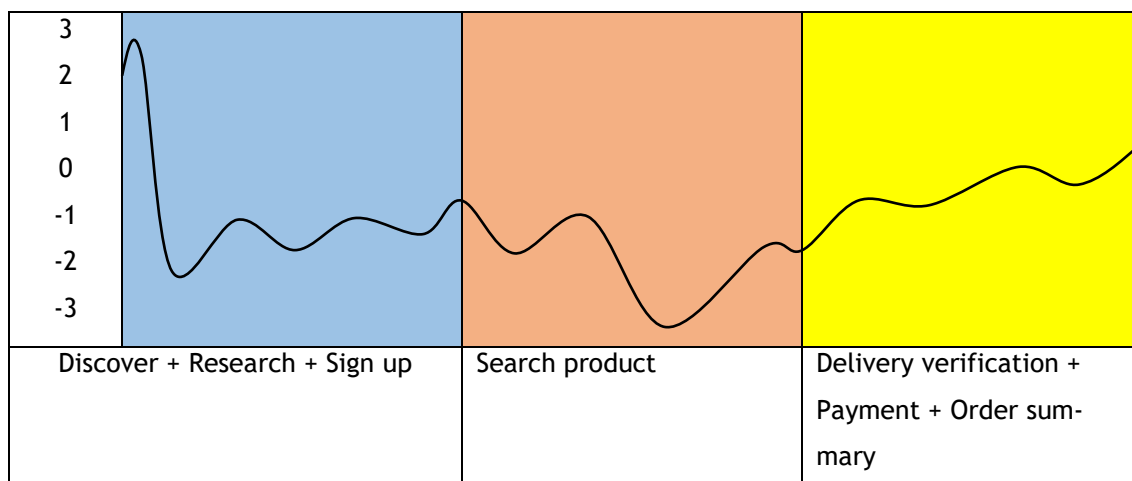


Figure 5: Joshua Reyes's emotion chart

When evaluating Joshua Reyes's emotion chart, the overall experience is, unfortunately, worse in comparison with what was presented in Marja Joutsenniemi's. Joshua's emotion reached the lowest when he could not manage to figure out the reason why two-thirds of his wanted food products were not on the webshop, despite their appearances on the company's main website without any notice of unavailability. Expectedly, the product database should have been sufficiently constructed before publishing the site for public use. This major shortcoming will leave irreversible negative impressions on users' perspective of the webshop and harm the shop's reputation in general. Commonly, when an identical website failed to deliver such fundamental requests from customers, they tend to leave the discomfort behind and look for a more satisfying, better solution.

In spite of that, fortunately, in this case, Joshua chose to bypass those deficiencies by assuring himself of reasonable and logical reasons that might have caused the problem. Nonetheless, it is still alarming that comforting customers that would behave like Joshua do not account for the majority of the target users. Moreover, it can also be seen that Joshua's emotion drastically declined at the beginning of the customer journey, when he was unable to access the webshop using his Lumia smartphone. This connectivity issue is unacceptable since it heavily affects the webshop's accessibility and restricts anyone whose device is similar from using the company's online service.

As a whole, Joshua's customer journey and emotion chart reflected a below average experience rigorously. Multiple unexpected errors and insufficiency were discovered, which should have been patched up before having the webshop ready for the market. These flaws raise an urgent change in the web management and UX design. The rush of having the site out there in

the absence of finalization brings back tremendous risks to the company, its business strategies and most significantly, their customers.

7.3 Usability testing process

Before having the usability testing initiated, the participants are all meticulously informed about the procedure, testing steps, approximate testing duration and reaffirmed that the online service - webshop - is being tested, not the participant themselves. They also have every right to stop the test at any time in case any uncomfortable or disturbing event takes place. Throughout the test, the test conductor does not disrupt or intervene with the participants' activities except for when they encounter any serious technical failure that prevents them from accomplishing the required tasks and solely observes and records participants' reactions and responses. Any unclarity or question from the participants should be cleared out before the testing process begins.

Then, the background questionnaire is used to accumulate the testing candidates' information to assist in apprehending their performance and behaviors in the test. It is a list of general questions that demonstrate the usage habits, user experience and personal predilection.

7.3.1 Background questionnaire findings

Ten people took part in the individual interviews and were required to fill in the background questionnaire prior to participating in the usability test. Comprehensive result is summarized as below:

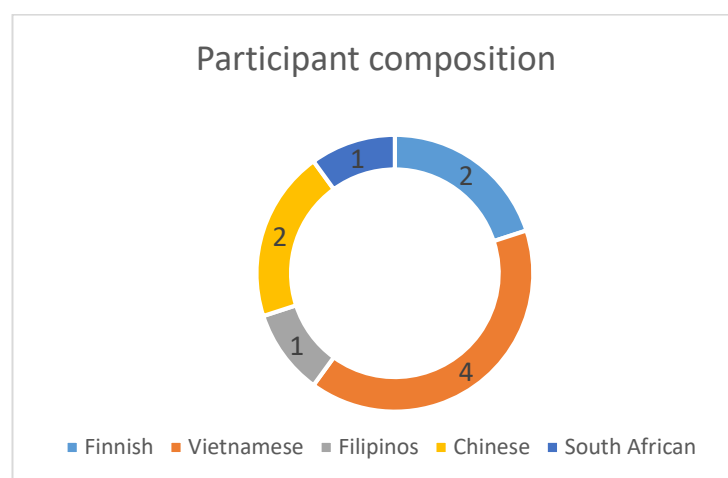


Figure 6: Participant composition graph

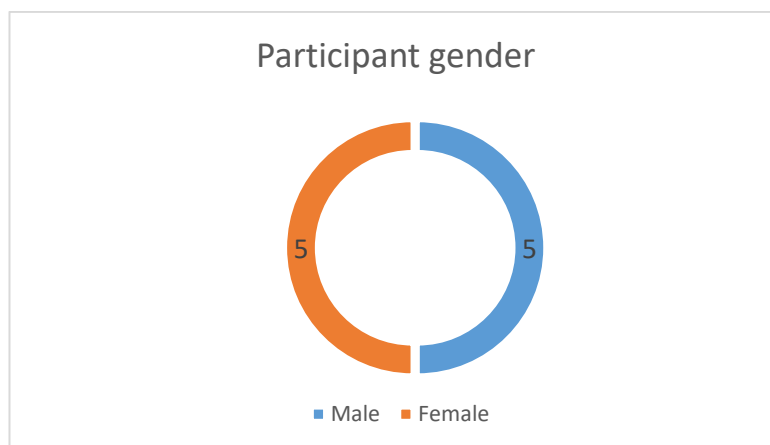


Figure 7: Participant gender graph

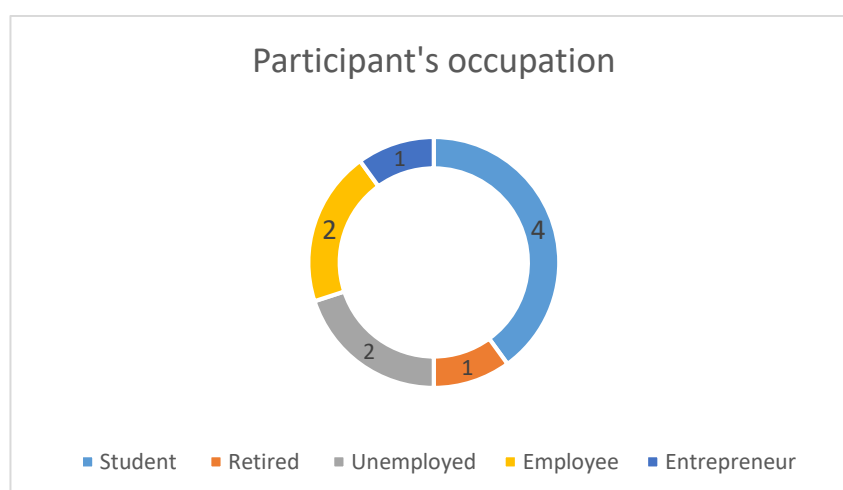


Figure 8: Participant's occupation graph

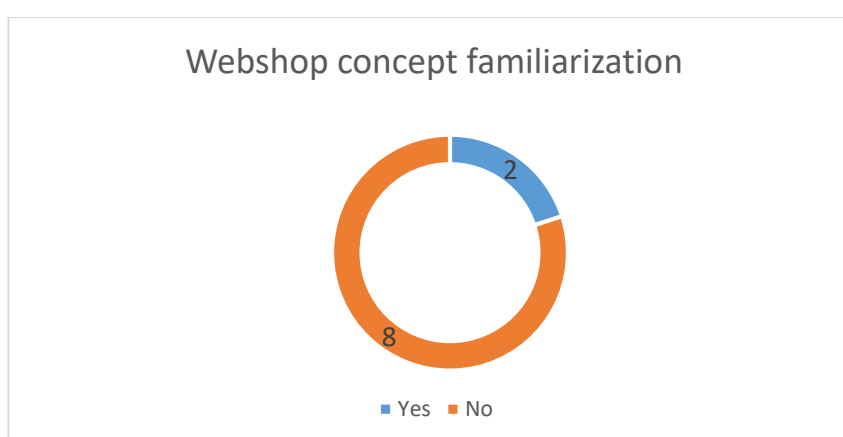


Figure 9: Webshop concept familiarization graph

7.3.2 Usability tasks

The participant is then assigned a specific set of tasks to complete on the webshop. The assignments remain unchanged for every participant to ensure the equality and integrity of the usability test. Task interpretation is demonstrated below:

	Description	Successful accomplishment criteria
Task 1	Access Asian Food Market's webshop (asianfoodonline.fi) and register a user account	A user account is signed up on the webshop without any difficulty encountered
Task 2	Search for food item A (Sushi rice - Sushiriisi 1kg), food item B (Rice vinegar - Riisietikka 500ml) Add both of them to the shopping cart Raise the quantity of item A to 2, then remove item B, add item C (Wasabi paste- Wasabi-tahna 43g) to the basket	Have product A and C ready in the basket with correct requisite quantity.
Task 3	Move on to payment and complete the purchase process	Finish the product order

Table 6: Usability tasks

7.3.3 Heuristic evaluation result

The conduction of the heuristic evaluation process followed along the guidelines of Nielsen (1995).

According to Nielsen (1995), the severity scale is categorized as:

- 0: Not a usability issue
- 1: Only a cosmetic issue, is not required to be patched up unless additional time resource is available
- 2: Minor usability issue: Low concern should be invested in fixing this problem

- 3: Major usability issue: High concern should be invested in fixing this problem due to its significance on the product/service
- 4: Usability catastrophe: Highly crucial to fix the problem before launching the product/service

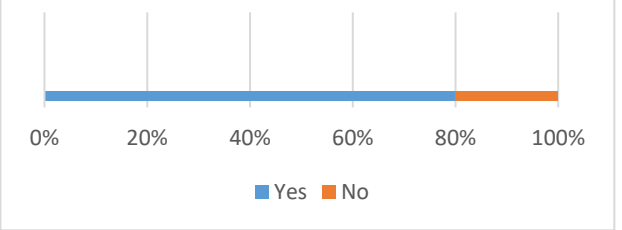
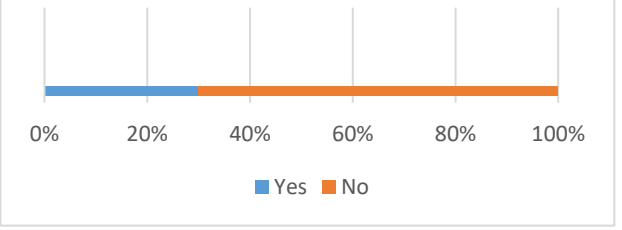
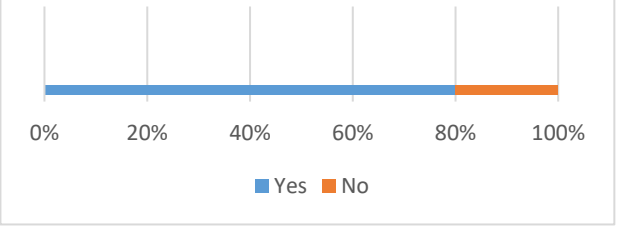
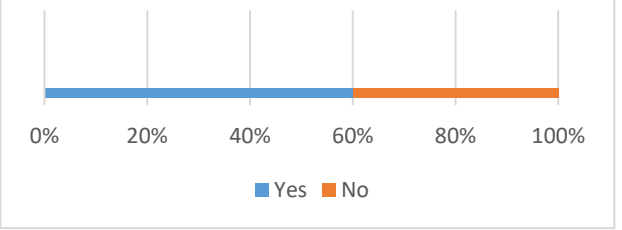
Heuristic principles	Severity	Problems
Visibility of system status	3	Users are completely not notified about current occasions, what is going on within a rational amount of time. No visible change was captured when the webshop's features are triggered (take the site's search function as the most salient example)
User control and freedom	0	Undo is supported to support users when they want to reverse and alter their choices. Whether they were visiting the front page or in the process of finishing their purchases, a back button was always available
Match between system and the real world	1	The language used for the webshop is clear, coherent and can be easily apprehended. However, few inconsistencies among couple of words used on the webshop were seen (a small number of English words found in an overall Finnish language used website)
Consistency and standards	3	The need of registering for a user account was not specified or mentioned, which creates confusion since users are reluctant to proceed to interact with the webshop not having the perceived benefits of the customer account
Error prevention	3	Confirmation option should be provided to the users before they perform any important step, such as checking out, which shall allow them a final opportunity to review or revise their ordered products

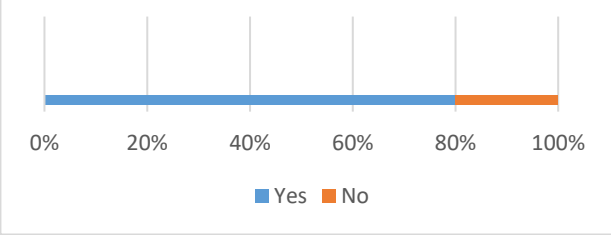
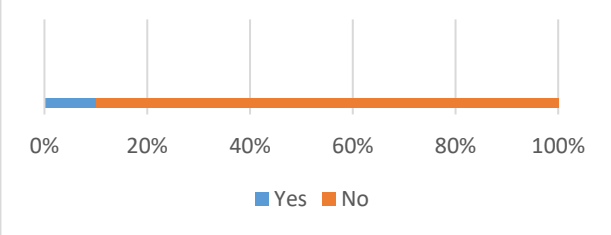
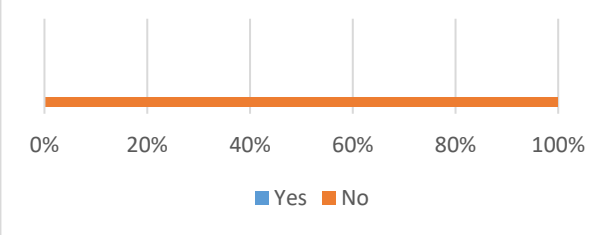
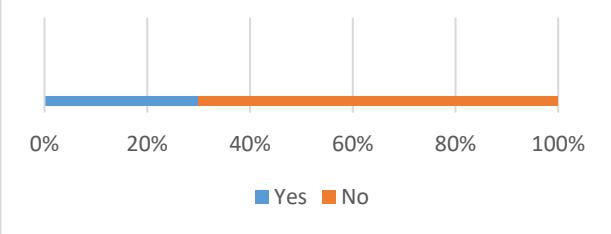
Recognition rather than recall	2	Webshop elements are categorized and visible. However, social media icons need to be relocated more logically so as not to prevent the users from viewing the search results
Flexibility and efficiency of use	2	The webshop is uncomplicated and does not contain any accelerator to assist experienced users in speeding up the process or actions, which can be quite uncomfortable
Aesthetic and minimalist design	0	Information presented on the site embraces enough details without redundancy
Help users recognize, diagnose, and recover from errors	4	Error messages need to be added in simple site's language, which designate the problems and provide viable solutions or alternative options. At the current state, no response is provided when users confront with unexpected issues. The site either reloads and stays the same as the time before the functionality was evoked or produces no notification or message.
Help and documentation	3	Online support is not available. FAQ (Frequently Asked Questions) section needs to be supplemented to resolve possible difficulties users might usually encounter

Table 7: Heuristic evaluation result

7.3.4 Post-test questionnaire result

Afterwards, participants are instructed to follow up with a post-test questionnaire to collect more comprehensive data on the webshop's advantages and restrictions. The same set of questions was provided to every participant in the same order so as to guarantee the utmost precision possible. End result of this process is presented beneath:

Question	Answer
<p>1. In general, do you find the webshop easy to navigate around and locate the web elements?</p>	 <p>Moving around the webshop and pinpointing fundamental website components are smooth and effortless to a majority of participants</p>
<p>2. Does the online service provide a diversity of different products?</p>	 <p>Most participants recognize the lack of variety in items displayed on the webshop.</p>
<p>3. Do you find any difficulty in searching for a specific product?</p>	 <p>Some web elements block the view of the users on the search results. Moreover, when the search function is executed, the website shows no change in User Interface, which involuntarily makes the participants misapprehend as the site failed to load the results</p>
<p>4. Do you enjoy the UI's simplicity and find it pleasant to view?</p>	 <p>To some experienced users, the webshop interface might be too straightforward and easy to use. The color scheme used is also too limited, which makes the site slightly monotonous and unappealing.</p>

<p>5. Are you able to cancel your current choice and move back to other options?</p>	 <p>Users can quickly reverse back and alter their activities through accessible back buttons</p>
<p>6. Do you receive any notification or assistance when encountering a problem on the webshop?</p>	 <p>No Q&A section can be found and no error message or notice appears to inform users about possible issues and solutions</p>
<p>7. Do you find the website content coherent and understandable?</p>	 <p>Intelligible and thorough information on the webshop comforts and ease user experience</p>
<p>8. Does the webshop contain sufficient information about the product, its components and nutrition facts?</p>	 <p>A few products are yet to be updated sufficiently with the actual product images. This might affect users' decision on buying those specific items since they might not be the ones users were familiar with and intended to purchase at first.</p>

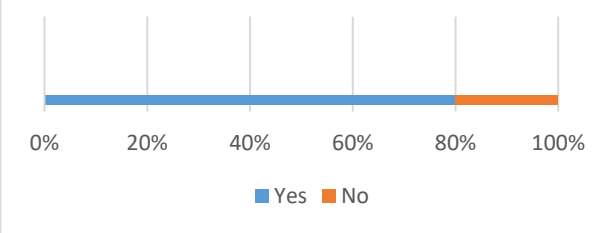
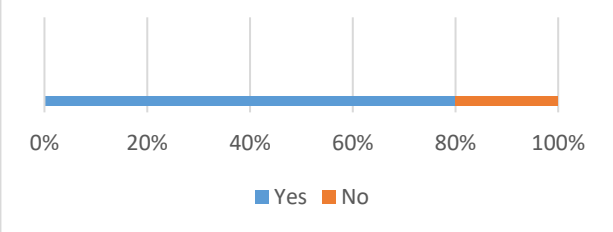
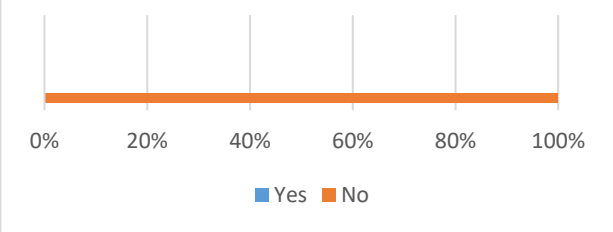
<p>9. Are the product types arranged logically and clearly visible?</p>	 <p>A large part of participants can easily locate the product categories through preset classes and even brands. Having the ability to find a particular item through its brand surprises and satisfies the users</p>
<p>10. Can you complete the payment process without any interference or trouble?</p>	 <p>Everything related to the products is summarized on one single page and distributed reasonably</p>
<p>11. Can you add/remove/change the quantity of your products in the check out process?</p>	 <p>No change can be performed once the users chose to move on to the checkout section. They have no other choice than to return to the shopping basket and manually remove the product, or when it concerns with the quantity of the chosen item, go directly to that one and modify the number</p>

Table 8: Post-test questionnaire result

8 UX redesign

To further improve the company's online service productivity, based on gathered data from the research process, a proposed list of requisite enhancements is presented as below:

- A comprehensive and fully functional English version of the webshop needs to be quickly implemented and can be effortlessly accessed through an English icon on the

top right of every page. Translated content must be completely identical to those in the original Finnish version. Any new information has to be simultaneously updated between the two versions.

- The language used has to be consistent throughout the entire page.
- Product categories are rearranged in alphabetical order to enhance and support visibility
- Unappealing black strip at the top of the website where the login and sign up options were located should be removed to ensure the site's aestheticism and integrity.
- Every product demonstrated on the webshop has to contain sufficient information, which includes actual product images with a similar size, detailed product ingredients/components, origin, price with tax, and availability. Meanwhile, the product rating system and review need to be in working order, as they are now not serving the intended purposes.
- Social media buttons are relocated to the footer of the page so as to prevent the search results from being blocked from the users' view. Beside from that, optional log in options (through social media account integration, or even text message) should be provided to enhance convenience for customer's uses.
- Privacy, along with terms and condition sections should be clearly presented and available for user's reference so as to ensure that their rights and the company's responsibilities are stated and protected when using the provided services.
- A dedicated section for FAQ (Frequently Asked Questions) needs to be assigned to serve novice users or even experienced ones that encounter unexpected problems, from which a quick solution or option to recover from those obstacles can be found.
- Error pop-ups need to be present anytime an error occurs to the webshop visitor to notify the severity of the fault and instruct further guidance to resolve the problems.
- Social media marketing needs to be more interactive and engaging with customers, rather than covering limited topics about new products or weekly fresh product arrival. Food-related subjects or inspiring stories about the food industry and its revolution can be considered as relevant to be shared with the users.
- In the payment process, users should be provided with the opportunity to alter the quantity of or even remove the chosen items, without having to return to the product page manually.
- The website mobile version should be configured to be accessible from all devices no matter which operating system they are on, with identical information presented clearly and identically in the site's primary languages.
- Webshop promotion should be expedited more effectively to attract more interaction from potential customers from various channels, through numerous ways.
- SEO customization needs to be carefully implemented for the webshop to support its appearance and discoverability on common search engines.

Adobe Photoshop CS6 software was utilized to illustrate some significant changes when some mentioned proposals being applied onto the webshop. These improvements shown in these wireframes are aimed at tackling a variety of urgent problems the webshop is having at the moment that requires immediate fix and modification.

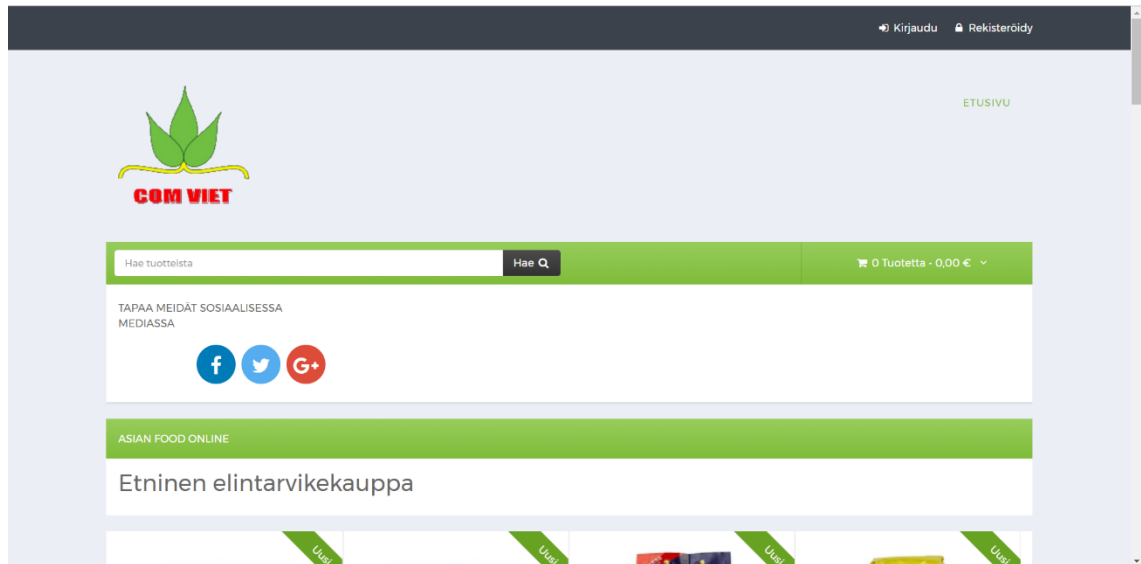


Figure 10: Webshop frontpage screenshot

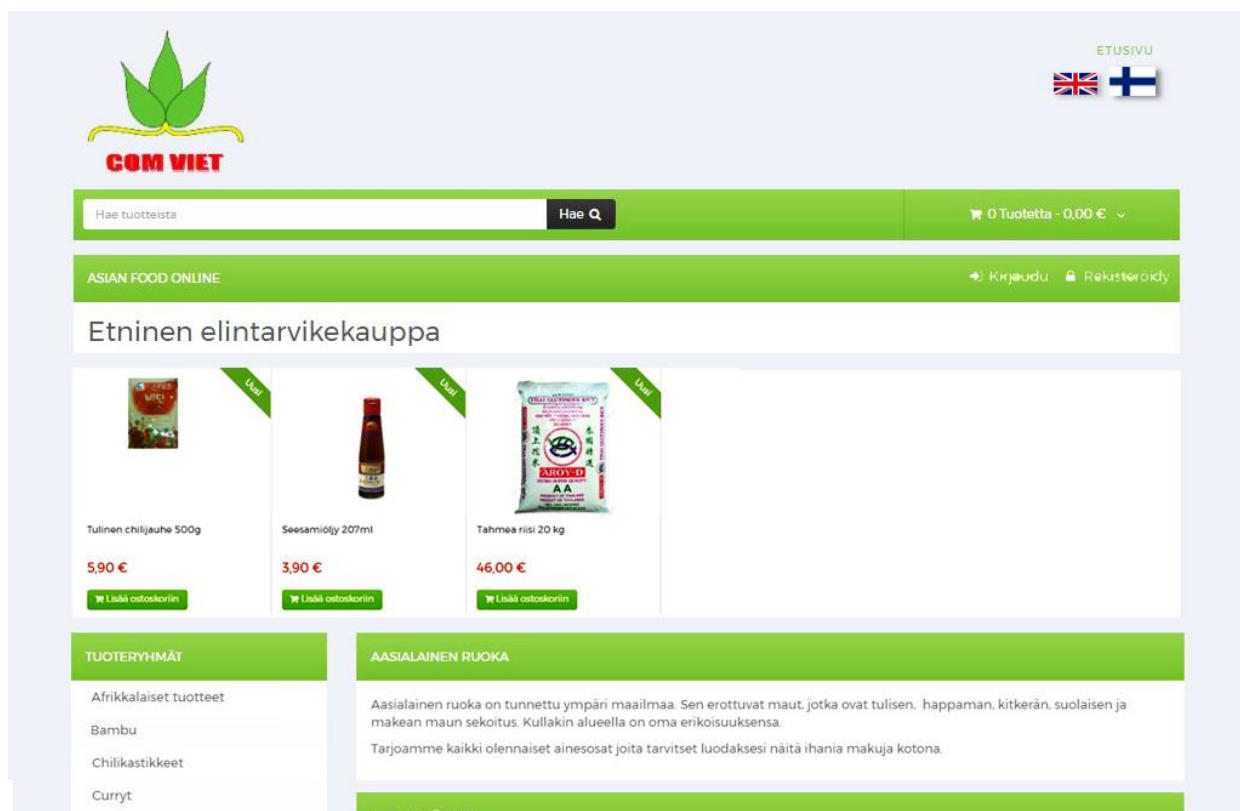


Figure 11: Webshop frontpage redesigned

It can be seen from the wireframe that language icons have been added for the webshop, which indicates that it now provides sufficiently and identically both Finnish and English content and can easily be converted from one to another through a simple click. Product types are rearranged in an alphabetical order to support transparency, while the front page sections are logically resized to provide a broader view and offer more information than before in the same area. Blank areas that took up space on the front page has been minimized or removed to leave room for divine content proportion. Moreover, both the sign in and sign up options have been relocated to a more rational position: right under the search bar, as opposed to where they were illogically designated before.

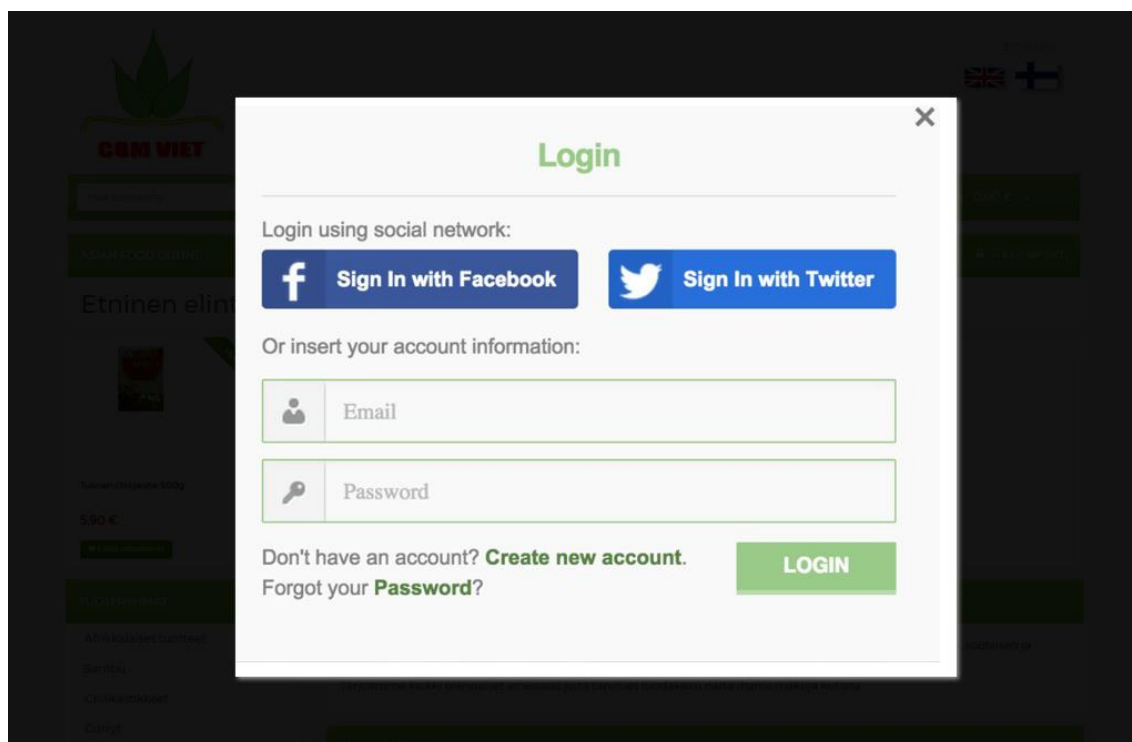


Figure 12: Sign in popup redesigned

An additional login popup is proposed to deliver other login options through common social media channels, apart from the standard one that requires a separate webshop account and password. Additionally, even if the new customer has not had any account linked to the webshop, there is also a possibility to sign up for one right on the same page, which could not have been done previously with the old design concept.



Figure 13: Webshop footer redesigned

Social media buttons are now repositioned to the footer and at the middle of the page, with the aim of confining the unnecessary space occupying at the top of the page. Site map, terms and privacy conditions can also be allocated here for user reference when required.

9 Conclusion

UX Design, being a fragment that belongs to an evolving technology world, requires proper application, flexible adaptation, and constant improvements that follow high-demanding design trends which alter every day. While a variety of present consumers consider online shopping a convenient and timesaving method, having a shopping platform that can fulfill their requests as delivering a soothing and pleasant experience can be vital for companies to entice new customers, raise brand awareness and open up to a huge leap ahead of other opponents in the same business.

As the case company operates a retail website, which carries two main functionalities: to deliver an enjoyable and well-worth browsing experience to potential customers and to minimize time wasted by easing the product purchasing process. However, through intensive user research conducted as listed above, users are yet to be satisfied with the experience gained from the case website.

The conducted researches for this thesis successfully designated and listed serious vulnerabilities that can affect or interfere with UX when visiting the webshop, which the company had yet identified due to the lack of specialization and familiarity with UX Design in particular, or website design and related topics in general. These also indicate an urgent necessity for modification, supplementation and proper maintenance in website management, design, marketing strategies and the company's overall business view for sustainable growth. This thesis also instigated the most important components of a balanced and well-implemented UX Design.

The specified theories, through which the author managed to evaluate the company's current business position, the website's efficiency and submit corresponding proposals, supported efficiently and worked harmoniously with the conducted researches and redesign procedure. In cooperation with this, a few website sections were redesigned and presented to illustrate the positive benefits the suggested modifications can bring along.

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Appendix 1: Interview question list for Asian Food Market Oy's CEO Juha Kalevi Korpela

INTERVIEW QUESTION

Asian Food Market Oy

1. Can you introduce yourself and your role in the organization?
2. Can you introduce about your company? What services, products do you provide at your company?
3. Are you aware of User Experience (UX) or User Experience Design (UED)? If yes, how would you define these concepts?
4. Who are your target customers?
5. What are your business goals in the near future (5-year-time)? Have you had any long-term plan related to business?
6. Can you tell me what is your website design process?
7. What are some of the biggest challenges you have faced during the implementation of the website(s)?
8. Have you noticed any difference before and after your website implementations?
9. I have noticed you are operating 2 different websites asianfoodmarket.fi and asianfoodonline.fi. Can you tell me the purposes of having 2 websites containing mostly the same content? Are you afraid of users not knowing which website is the main one?
10. Do you intend to simplify and/or remove one of the websites?
11. Do you intend to have an English version for your new website? If no, why not?
12. When designing your websites, did you follow any industry/design trend?
13. Do you have any plan to improve the website's current status and UX?
14. Have you had anyone conducted a UX research for the organization? Do you intend to?
15. Do you maintain frequent interactions with users through social media or any other communication channels?
16. What do you consider as your strengths in the market? Your weaknesses?
17. What could have been done today that is not being done already? What do you see as opportunities for your company at the moment?
18. What obstacles/difficulties do you face right now?

Appendix 2: Background questionnaire

Background Questionnaire

i. Personal information

1. What is your age? _____
2. What is your gender?
 - a) Male
 - b) Female
3. What is your occupation?
 - a) Student
 - b) Self-employed
 - c) Retired
 - d) Unemployed
 - e) Entrepreneur
 - f) Employer
 - g) Employee
4. What is your language skill?
5. Have you ever gone online shopping?
 - a) Yes. Can you list a few? _____
 - b) No
6. What type of products do you prefer to purchase online? _____
7. Have you ever used any e-commerce website to order food products?
 - a) Yes
 - b) No

If no, are you willing to try out a digital service as such?

 - a) Yes
 - b) No

ii. Internet Usage

1. How often do you use the Internet?
 - a) Daily or almost daily
 - b) Few times per week
 - c) Few times per month
 - d) Hardly use
 - e) Have never used
2. What accounts for most of your Internet usage?
 - a) Email exchange, work-related matters
 - b) Social media
 - c) Digital services

- d) Recreational purposes
- e) Online shopping

3. Asian Food Market's webshop

1. Are you acquainted with Asian Food Market's webshop?
 - a) Yes
 - b) No
2. Through which channel are you familiar with Asia Food Market's webshop?
 - a) Social media channels (Facebook, Twitter, etc.)
 - b) Advertisement at the shop location
 - c) Friends and/or acquaintances
 - d) Web search engines (Google, Yahoo search, Bing, etc.)
3. What is your opinion on Asian Food Market's concept?